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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO: |
|----------------------------|--|----------------------|---------------------------------|------------------|
| 10/018,976 | 03/14/2002 | Manfred Kogler | 1406/34 | 3027 |
| JENKINS, WII 3100 TOWER | 7590 10/03/200 LSON, TAYLOR & HU BLVD., Suite 1200 | | · EXAMINER GHULAMALI, QUTBUDDIN | |
| DURHAM, NO | DURHAM, NC 27707 | | ART UNIT | PAPER NUMBER |
| | | | 2611 | |
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| | | | 10/03/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | |
|--|---|--------------------------|--|--|--|
| • | 10/018,976 | KOGLER, MANFRED | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| , | Qutub Ghulamali | 2611 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on <u>20 August 2007</u> . | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☒ This | This action is FINAL . 2b)⊠ This action is non-final. | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | |
| 4) Claim(s) 1-9 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-9 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ate atent Application | | | |

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DETAILED ACTION

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Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/21/2007 has been entered.

Response to Remarks/Amendments

- 2. Applicant's request for consideration of amendment, pages 3-4, filed 08/21/2007, with respect to the rejection of claim(s) 1-9, under 35 U.S.C 103(a) have been fully considered and after a further search and examination claims 1-9 now indicated allowable. However, in order advance prosecution in the case an examiner's amendment was considered necessary so as to correct for some minor deficiency in the claim 1 noted here under.
- 3. Applicant's arguments, see page 4-9, filed 08/21/2007, with respect to the rejection(s) of claim(s) 1-9 under 35 U.S.C 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, the amended claim 1 and dependent claims 2-9, upon further consideration, are rejected based on new

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ground(s) of rejection made in view of new art to Anne. The rejection based on the new art follows.

Claim Objections

4. Claim 1 is objected to because of the following informalities:

Claim 1, line 3, after "codec circuit to a transmitted" the acronym "PCM" needs to be replaced with -- Pulse Code Modulation (PCM) --.

Claim 1, line 5, after "device configured to identify" the word "the" needs to be replaced with -- a --.

Appropriate correction is required.

Note: The above corrections were discussed with the applicant's representative, Mr. David Sigmon, on 9/14/2007.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anne et al (US Patent 6,744,812).

Regarding claim 1, Anne discloses a codec circuit, a programmable (tunable) digital bandpass filter, for providing filter characteristics (col. 16, lines 11-24, 35-40) of

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the codec circuit to a transmitted PCM signal (col. 4, lines 50-65), a signal identification device configured to identify a type of modulation and transmission speed of a transmitted PCM signal and configured to set filter coefficients for the at least one programmable digital high pass filter and the at least one programmable digital low pass filter based on the identified modulation type and transmission speed (or transmission rate) of the transmitted signal (for example in a V.90 the sample rate preferably is 8 kHz) (col. 5, lines 1-20, 25-40; col. 11, lines 1-15; col. 16, lines 11-24, 35-40; col. 21, lines 11-15). Anne however, does not show use of filter labels as low pass and high pass filter, however, as understood by the examiner, and as illustrated in fig. 2, (see also col. 21, lines 11-24) the filter bank (204) includes filters, at least one digital high pass filter and at least one digital low pass filter and regarded as connected in series electrically and as disclosed by Anne these filters may be tunable (or programmable) if desired (col. 10, lines 66-67; col. 11, lines 1-15; col. 21, lines 12-24) as would be obvious to a person of skill in the art at the time the invention was made to utilize, to arrive at the same or similar results, for achieving the desired filter characteristics once the modulation mode or type is recognized because once the modulation technique is selected, the modulation selection routine 432 determines which region in the lookup table 400 holds the waveform samples for the selected modulation scheme, the modulation and filtering routine 428 then creates an outgoing digital signal based on data received through the mac port 424 by selecting waveform samples and bandpass filters the modulated data prior to transmitting through the codec).

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Regarding claim 2, Anne discloses setting filter coefficients are stored in coefficient memory devices, which are associated with the programmable digital high-pass and low-pass filters (col. 10, lines 8-54).

Regarding claim 3, Chung discloses the memory devices can be in the form of a random access memory (RAM) (col. 10, lines 24-29).

Regarding claim 4, Chung discloses memory devices are connected via coefficient setting lines to the signal identification device (fig. 4, elements 220, 400, 424).

Regarding claim 5, Anne discloses programmable digital filters can be set to a 3rd to 5th order and if desired can be designed to a seventh-order, since Anne discloses that these filters are tunable (col. 21, lines 5-15).

Regarding claims 6, Anne discloses upper and lower signal transmission cut-off frequencies can be set by means of filter settings (shows filter roll-off below 4MHz and above 8 MHz (col. 16, lines 21-24, 35-40).

Regarding claims 7 and 8, Anne discloses lower and upper signal transmission cut-off frequency can be set as part of the filter characteristic desired in bandpass filtering (col. 21, lines 5-24).

As to claim 9, Anne discloses filter to compensate for ripple in the passband filter (col. 21, lines 24-30; col. 22, lines 6-12).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patents:

US Patent (6,504,865) to Liang et al.

US Patent (5,566,088) to Herscher et al.

US Patent (5,960,035) to Sridhar et al.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qutub Ghulamali whose telephone number is (571) 272-3014. The examiner can normally be reached on Monday-Friday, 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

QG. September 28, 2007.

CHIEH M. FAN
SUPERVISORY PATENT EXAMINER